



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of

STEPHEN B. AUGER

Serial No.: 08/865,419

Filed: May 28, 1997

Art Unit: 1751

Examiner: C. Liott

For: MINERAL STAINS FOR WOOD AND OTHER SUBSTRATES

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OCT 19 2001

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APPEAL BRIEF

To the Commissioner of Patents and Trademarks

Sir:

REAL PARTY IN INTEREST

The above-identified Applicant is the real party in interest in this case.

RELATED APPEALS AND INTERFERENCES

No other related Appeals and Interferences are pending.

STATUS OF CLAIMS

Claims 1-10, 20-22, and 30-36 were finally rejected over the art of record.

Claims 23, 25, 26, and 29, which were withdrawn from consideration have been cancelled. The Examiner contends in paper # 36, page 2, Item 9, that "... [PTO] has no record of an amendment cancelling said claims." These claims were indeed

cancelled in the Response filed April 28, 2000 (see page 1, line 1 under the heading In the Claims). The office Action of August 2, 2000, paper # 31, acknowledges that the amendments of April 28, 2000 have been entered. Applicant believes that the burden is on the Examiner to show why and how the patent office would enter the April 28, 2000 amendments partially and selectively.

Claims 11-19, 24, 27, and 28 have also been cancelled.

A copy of the appealed claims is appended hereto in the Appendix. Applicant believes that the claims appended to this Appeal Brief are the claims of record in Applicant's file.

The Examiner states in paper # 36, page 2, Item 8: "Claims 1-3, 20-22 and 31 are incorrect". Applicant respectfully requests the Examiner to provide a copy of the claims of record in this case at the patent office so that Applicant understands exactly what is "incorrect" about the appended claims.

#### STATUS OF AMENDMENTS

No amendments were filed after the final rejection.

#### SUMMARY OF THE INVENTION

The invention (Specification pages 8-17) is a two-step process involving a non-toxic, water-based mineral solution and a low toxicity water-based oxidizing solution applied sequentially to unfinished wood products (page 8, lines 18-20). The process may be adapted for the coloring and finishing of woodlike products such as bamboo or rattan, paper, recycled cellulose

products, cotton and other cloths, leather, certain porous plastics, tile, cement, and other masonry, and other substrate substances (specification page 8, lines 20-23).

The user first brushes, sprays, or otherwise applies a water-based solution "A" onto a wood or other product, lets the product dry for about 5-30 minutes, depending on temperature and humidity, then applies a second water-based solution "B" (page 8, lines 24-26). Color change begins immediately and when the B solution dries, in another approximately 5-30 minutes, the product is permanently stained (page 8, lines 26-28). The solutions may also be applied by soaking the substrate in the solution, at standard temperature and pressure or at either extreme or combinations as with typical pressure treatments for lumber to ensure thorough penetration of thicker substrates (page 9, lines 1-2).

The A solutions contain a variety of mineral salts (such as a variant of the iron-rich compounds found in nutritional supplements) and other natural compounds that soak into the wood surface readily (page 9, lines 16-18). The B solutions contain an oxidizing agent, such as dilute peroxides similar to the hydrogen peroxide found in many medicine cabinets (page 9, lines 18-20). Preferred B solutions are somewhat more concentrated (page 9, line 20).

The oxygen source causes an oxidation reaction, bonding the minerals in solution A to or among the cellulose fibers in the wood, or other matrix material of a substrate, a process referred

to here as "crosslinking" (page 9, lines 22-24). The chemical nature of the crosslinking reaction is suggested by the fact that a color change results from the combination of solution A, solution B, and the substrate (page 9, lines 24-26). The resulting color, unlike the clear solutions and their components, is not water-soluble (page 9, lines 26-27).

The process involves saturating the fibers of a wood or other product matrix with a solution of minerals in a water-soluble form and then oxidizing said minerals in the fibers or matrix to change the color, texture, and general appearance of the wood or other properties (page 10, lines 3-5). The coloring process renders mineral salts into a stable, insoluble form, perhaps an oxide, coordination compound, or other water-insoluble compound or complex, referred to here as a cross linked compound (page 10, lines 6-8).

The metal salt formulation soaks into the substrate, impregnating it with mineral ions, which are then converted by the oxygen source into an insoluble coloring compound (page 10, lines 9-10). Thus, a metal oxide may serve as a metal salt if it is solubilized with an acid, applied so as to penetrate into a substrate, and then reacted with an appropriate oxygen source to generate the desired color or other effect (page 10, lines 10-13).

The coloring agent may associate physically or chemically with the substrate, via absorption, mechanical admixture, entrapment, polar attraction, or covalent bonding (page 10, lines

19-21). With cellulosic and leather products, the reaction may involve the cellulose or collagen matrix of the substrate article (page 10, lines 21-24). With masonry, the substrate may or may not react with the metal salt and oxygen source, so long as the colored compound is fixed insolubly within the substrate (page 10, lines 24-26).

In some cases, the B solution is applied before the A solution in order to obtain a different effect (page 11, lines 9-10). Different mineral solutions and different oxidizing agents create markedly different effects on wood, and these finishes can be customized for specific application to a wide variety of materials (page 11, lines 10-12).

The invention relates to compositions and kits comprising the various A and B solutions prepared by combining water soluble or other mineral salts, oxidizing agents, and other substances into an aqueous solution (page 11, lines 13-15).

To form the various preparations of Solution A, a measured weight of the mineral or minerals is mixed in a volume of purified water (page 12, lines 24-25). To form the iterations of Solution B, liquid hydrogen peroxide or powdered sodium peroxide are mixed in a volume of water (page 12, lines 25-27). Alternatively, sodium hydroxide is added to a hydrogen peroxide solution and may be neutralized or buffered if desired (page 12, lines 27-28).

Mineral salts and oxides have been used according to the invention to stain wood (page 14, lines 6-7). Other minerals

capable of reacting with an oxygen source in contact with a substrate to color the substrate or provide other effects according to the invention may be selected from salts of elements of columns 2 through 6 of the Periodic Table of the Elements, including the transition elements, Lanthanides, and Actinides (page 14, lines 17-20).

The effect may vary with the source of water (page 15, line 21). The effect may vary with the solution in which the minerals or peroxides are dissolved or suspended (page 15, lines 25-26). The effect may vary with the concentrations of the solutions (page 16, line 4). Generally, more dilute solutions create lighter color density but in some cases they actually give the appearance of a different color (page 16, lines 4-6).

In all the examples defined in the specification (pages 18-21), Solution A is made up as a solution of mineral in water. Concentrations are given as percent (weight/volume), or the number of grams of mineral and the volume of water is given (page 17, lines 18-20). Solution B is made up of a 15% (v/v) solution hydrogen peroxide or a 0.3% sodium peroxide solution (made from 3.0 grams per liter of water) (page 17, lines 20-21).

### ISSUES

Whether claims 1 and 31 are patentable under 35 U.S.C. 112, second paragraph?

Whether claim 1 is patentable under 35 U.S.C. 102(b) over Matsushita (JP 60-250,906)?

Whether claims 3-7, 9-10 and 30-36 are patentable under 35 U.S.C. 102(b) over Brown (U.S. patent 5,173,085)?

Whether claims 3-10 and 30-36 are patentable under 35 U.S.C. 102(b) over Tennigkeit (U.S. patent 4,992,077)?

Whether claims 1, 3-6, 9-10, 30, and 32-36 are patentable under 35 U.S.C. 102(b) over Light (SU 499,297)?

Whether claims 3-7, 30, 31, and 36 are patentable under 35 U.S.C. 102(b) over Yantai (Yantai University 86-104,010)?

Whether claims 2-8, 9-10, 20-22, 30-34, and 36, are patentable under 35 U.S.C. 102(b) over Dombay (U.S. patent 3,554,785)?

Whether claims 2-10, 20, 21, 30, 31, and 36 are patentable under 35 U.S.C. 102(b) over Bures (CS 145,495)?

Whether claims 2-8, 9-10, 20-22, and 30-36, are patentable under 35 U.S.C. 103(a) over Dombay (U.S. patent 3,554,785)?

Whether claims 2-10, 20-22, 30-36 are patentable under 35 U.S.C. 103(a) over Bures (CS 145,495)?

#### **GROUPING OF CLAIMS**

**The claims do not stand or fall together.**

#### **ARGUMENTS**

Claims 1 and 31 are patentable under 35 U.S.C. 112, second paragraph.

The last five lines of claim 1 simply define the function of the components of the kit. Therefore, the Examiner's statement

that "it is improper to recite method steps in a kit claim" is not understood. Besides, that recitation cannot, and does not, form any basis for the Examiner's rejection of the claim being "indefinite." Contrarily, the last five lines of claim 1 render claim 1 definite than otherwise. Thus, the rejection of claim 1 should be reversed.

Claim 31 does not reference any "base." Applicant had deleted the term "base" in a Response filed April 28, 2000. In fact, the Examiner acknowledged in a subsequent office action (paper # 31, page 2) that applicant had proposed that amendment (among others) to incorrect line numbers, and that the Examiner had entered the proposed amendments to the correct lines, which included line 8 of claim 31 which had recited the term "base". Reversal of this rejection is also respectfully requested.

**The present claims are patentable under 35 U.S.C. 102(b).**

For an invention to be anticipated, it must be demonstrated that each and every element of the claimed invention is present in the "four corners" of a single prior art, either expressly described therein or under the principle of inherency. Lewmar Marine Inc. v Barient Inc., 3 USPQ2d 1766, 1767-1768 (CAFC, 1987).

**Each of the present claims is patentable over the art of record.**

The invention uniquely provides permanent wood staining without use of hazardous or environmentally unfriendly chemicals,



which is new and unobvious. The invention has two parts, and the staining is accomplished in two steps. The first part is an aqueous solution of metal salts, which is applied to the wood and which penetrates the surface of the wood. The second solution is an aqueous oxidizer solution which penetrates the wood and fixes the metal salts in place within the wood.

The Examiner contends in paper # 36, page 2, Item 6b, that Applicant has failed to separately argue the patentability of each of the claims, other than pointing out the differences between the claims and the references. However, the final rejection of the claims merely references the previous office action (paper # 31) as the basis for the rejections. A review of the final office action (paper # 36) and of its basis (paper # 31) clearly indicates that the Examiner has failed to meet the original burden of presenting a prima facie case of anticipation by the references. Neither office action points out where in the references there is a description, teaching or inherent presence of each of the claimed features of each of the appealed claims. Since the patent office has not met its burden, it would be mere speculation, and an undue burden, on Applicant's part to point out the basis for each of the claimed features in the references of record that may have been in the mind of the Examiner but not reflected in any office action.

Attention is kindly drawn to the Federal Circuit's dictum:

Th examin r cannot sit mum, leaving th applicant to shoot arrows into th dark hoping to som how hit a secr t obj ction harbored by th examiner. Th 'prima faci cas ' notion ... was intended to leav no doubt among xaminers

that they must state clearly and specifically any objections (th prima facie cas ) to patentability, and give th applicant fair opportunity to m t thos obj ctions ... th concept serves to level the playing field and reduces the likelihood of administrative arbitrariness. (emphasis added) In re Oetiker, 25 USPQ2d 1443, 1447 (Fed. Cir. 1992) (Plager, J., concurring); see In re Piasecki, 233, USPQ 785, 788 (Fed. Cir. 1984).

Claim 1 is patentable under 35 U.S.C. 102(b) over Matsushita.

Claim 1 describes a kit for imparting a pre-determined color to a solid wood substrate, comprising an aqueous solution of a first compound consisting of a mineral salt and water as a first application on the solid wood substrate, and a second component comprising an aqueous solution of a peroxide as a sequential application on the solid wood substrate, the mineral salt and peroxide solutions as sequential applications in effective amounts on the substrate and colored layer on the substrate formed by the applications reacting with each other in the presence of the substrate to impart the color to the substrate.

Matsushita relates to colored woods manufactured by impregnating woods with reactive coloring solutions and with dye solutions and synthetic resins and color coatings. The present specification clearly points out the disadvantages of prior art staining systems, such as Matsushita, and provides for a unique coloring system that allows substances to be applied to the wood that react in situ resulting in automatic coloring of the substrate because of the reaction. Claim 1 does not relate to coloring the substrate by applying a dye or a synthetic resin or

coloring solutions. Matsushita thus teaches away from the claimed invention and cannot anticipate claim 1.

The absence from prior art reference any claimed element negates anticipation. Kloster Speedsteel AB v. Crucible, Inc., 230 USPQ 81, 84 (Fed. Cir. 1986).

Claims 3-7, 9-10 and 30-36 are patentable under 35 U.S.C. 102(b) over Brown.

Claim 30 describes a kit for treating and coloring a wood substrate, comprising a first component aqueous solution of oxidizable metal salt preparation for a first application to the wood substrate, and a second component aqueous solution of oxygen source preparation for a sequential application to the wood substrate, the aqueous solution preparations being adapted to sequentially penetrate the wood substrate when sequentially applied, and both aqueous solution preparations when applied sequentially in effective amounts, being adapted to react with each other within the wood substrate to impart physical color characteristic to the wood substrate.

Brown does not dye wood, but rather dyes hair, which has nothing to do with dying wood. Moreover, Brown has an intermediate step of contacting hair with an organic solution and rinsing or shampooing the hair, and then bleaching the hair with hydrogen peroxide to obtain a lighter color. The hydrogen peroxide in Brown leads away from the present invention, because the hydrogen peroxide does not fix the metal salts in place. Nor

is there anything in Brown which would suggest that Brown be used with wood.

The dependent claims add further unique features to claim 30, and each is patentable over Brown.

The office action is silent as to the basis for the rejection of each of the dependent claims since there is no showing as to where in Brown there is anticipation for each of the claimed features. See In re Oetiker, supra. Besides, the Examiner concedes in paper # 36 that applicant has pointed out the differences between the claims and the references, which suffices to overcome any anticipation rejection of the claimed features.

Claim 3 adds to claim 30 that the oxygen source is a peroxide and both formulations are aqueous solutions.

Claim 4 adds to claim 30 that the metal salt is selected from the group consisting of salts of iron, silver, zinc, cerium, copper, magnesium, molybdenum, nickel, tin, chromium, aluminum, barium, calcium, sodium, potassium, and titanium, and combinations.

Claim 5 adds to claim 30 that the metal salt is selected from the group consisting of salts of aluminum, antimony, beryllium, bismuth, cadmium, chromium, cobalt, copper, gold, iridium, lead, magnesium, manganese, mercury, molybdenum, nickel, niobium, osmium, platinum, plutonium, potassium, rhodium, selenium, silicon, silver, sodium, tantalum, thorium, tin,

titanium, tungsten, uranium, vanadium, and zinc, and combinations.

Claim 6 adds to claim 30 that the metal salt is selected from the group consisting of sulfates, chlorides, perchlorates, acetates, nitrates, permanganates, thiosulfates, and oxides, and combinations.

Claim 7 adds to claim 30 that the metal salt is selected from the group consisting of silver sulfate, silver perchlorate, silver nitrate, silver sulfate, iron (II) chloride, zinc perchlorate, iron (II) perchlorate, iron (II) sulfate, copper acetate, sodium thiosulfate, magnesium thiosulfate, potassium thiosulfate, potassium nitrate, potassium permanganate, copper nitrate, copper II carbonate dihydroxide, copper sulfate, titanium III sulfate, magnesium nitrate, cerium (III) perchlorate, and cerium nitrate, and combinations.

Claim 9 adds to claim 30 that the oxygen source is a peroxide.

Claim 10 adds to claim 30 that the oxygen source is selected from the group consisting of hydrogen peroxide, sodium peroxide, zinc peroxide, calcium peroxide, barium peroxide, and lithium peroxide, and combinations.

Claim 30 describes a kit for coloring a wood substrate, comprising a metal salt preparation, and an oxygen source preparation, the preparations being adapted to penetrate the substrate when applied, and both preparations, when applied sequentially in effective amounts, being adapted to react with

each other to impart a fixed physical characteristic to the substrate.

Claim 31 adds to claim 30 that the metal salt preparation and/or the oxygen source preparation further comprises an additive selected from the group consisting of thickener, alcohol, emulsifier, coloring agent, pigment, dye, bleach, sealer, finishing agent, tint, acrylic finish, latex finish, polyurethane, alcohol, gelling agent, tableting agent, surfactant, buffer, citric acid, tannic acid, acetic acid, other acid, color, salt, stabilizer, antimicrobial, antifungal, insecticide, insect repellent, ultraviolet protectant, and fire retardant, and combinations.

Claim 32 adds to claim 30 that the metal salt preparation is an aqueous solution comprising between about 0.001% and about 20% (w/v) metal salt.

Claim 33 adds to claim 30 that the oxygen source preparation is an aqueous solution comprising between about 0.1% and about 50% (w/v) peroxide.

Claim 34 adds to claim 30 that the metal salt preparation is an aqueous solution comprising between about 0.025 % and about 8% (w/v) metal salt.

Claim 35 adds to claim 30 that the oxygen source preparation is an aqueous solution comprising between about 0.3% and about 15% peroxide.

Claim 36 adds to claim 30 that the preparations are concentrates suitable for dilution by a user.

Brown, from an unrelated art, provides for dyeing hair to promote melanogenesis in hair, which has nothing to do with solid wood substrate coloring. Brown defines dyeing the hair with intermittent intervals to a dark color and then treating with hydrogen peroxide to obtain the desired color. That is contrary to the claimed in situ reaction of the mineral salts and hydrogen peroxide within the wood substrate being treated.

Thus, Brown does not teach nor suggest the claimed invention and therefore cannot anticipate the claims.

Claims 3-10 and 30-36 are patentable under 35 U.S.C. 102(b) over Tennigkeit.

Claims 3-10 and 30-36 have been described earlier.

The office action is silent as to the basis for the rejection of each of the dependent claims since there is no showing as to where in Brown and in Tennigkeit there is anticipation for each of the claimed features. See In re Oetiker, supra. Besides, the Examiner concedes in paper # 36 that applicant has pointed out the differences between the claims and the references, which suffices to overcome any anticipation rejection of the claimed features.

Like Brown, Tennigkeit relates to dyeing hair with an oxidation dye mixed with an oxidizing agent and a catalyst. However, nothing in the reference teaches, suggests or inherently provides for coloring a wood substrate in which substances are applied to the substrate and react in situ to provide the

coloring which has nothing to do with pre-made dyes being applied to hair. Thus, the reference leads away from the claimed invention.

"To establish inherency, the extrinsic evidence 'must make it clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.'" In re Robertson, 48 USPQ2d 1949, 1951 (Fed. Cir. 1999) quoting from Continental Can Co. v. Monsanto Co., 20 USPQ2d 1746, 1749 (Fed. Cir. 1991).

Claims 1, 3-6, 9-10, 30, and 32-36 are patentable under 35 U.S.C. 102(b) over SU '297 (Light).

Claim 1 describes a kit for imparting a pre-determined color to a solid wood substrate, comprising a first component of an aqueous solution of a mineral salt, and a second component of an aqueous solution of a peroxide, the mineral salt and peroxide solutions being capable, when applied sequentially in effective amounts to the wood substrate, of reacting with each other in the presence of the wood substrate to impart the color to the substrate.

Claims 3-6, 9-10, 30, and 32-36 have been described earlier.

The office action is silent as to the basis for the rejection of each of the dependent claims since there is no showing as to where in Light there is anticipation for each of the claimed features. See In re Oetiker, supra. Besides, the



Examiner concedes in paper # 36 that applicant has pointed out the differences between the claims and the references, which suffices to overcome any anticipation rejection of the claimed features.

Light has nothing to do with the present invention because Light is a process for de-canning goatskin, followed by a pickling and re-canning or final canning, followed by neutralization and a combined dying and tallowing. Nothing in Light would refer to wood, and the use of the multiple steps in Light would lead away from the present invention. The complexity of Light would lead one away from the present invention. Moreover, there is nothing in the multiple step process of treating leather that would suggest a dying of wood in a two-step process.

Light relates to leather glove production by tanning in a combined hydrogen peroxide-sodium hydroxide solution and then treating with aluminum slats and dyeing. The reference teaching seeks to solve the problem of repeated tanning and pickling of leather rather than having anything to do with color preservation as uniquely provided by the present invention.

"Inherency may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. Continental Can Co. v. Monsanto Co., 20 USPQ2d 1746, 1749 (Fed. Cir. 1991).

Claims 3-7, 30, 31, and 36 are patentable under 35 U.S.C. 102(b) over Yantai.

Claims 3-7, 30, 31, and 36 have been described earlier.

The office action is silent as to the basis for the rejection of each of the dependent claims since there is no showing as to where in Yantai there is anticipation for each of the claimed features. See In re Oetiker, supra. Besides, the Examiner concedes in paper # 36 that applicant has pointed out the differences between the claims and the references, which suffices to overcome any anticipation rejection of the claimed features.

Yantai relates to treatment of marble to form glazed surfaces and thereafter etching and exposing the treated surface to make black markings of the decorations. That teaching has nothing to do with wood substrates and would in fact lead away from the present invention since there is not teaching or suggestion of an in situ reaction of two solutions to give an end-result of substrate collation.

Claims 2-8, 9-10, 20-22, 30-34, and 36 are patentable under 35 U.S.C. 102(b) over Dombay.

Claims 2-7, 9-10, and 30-34, and 36 have been described earlier.

Claim 8 adds to claim 30 that the metal salt is selected from the group consisting of molybdenum (VI) oxide, zinc sulfate, copper (II) chloride, nickel perchlorate, nickel sulfate, copper

(II) perchlorate, tin (II) sulfate, tin (I) chloride, chromium (III) sulfate, aluminum sulfate, cerium (III) perchlorate, zinc perchlorate, titanium hydride, chromium (III) perchlorate, zinc powder, manganese (II) chloride, aluminum chloride, titanium (IV) chloride, silver chloride, and titanium (II) sulfate, and combinations.

Claim 20 adds to claim 2 the step of drying the substrate between the two steps.

Claim 21 adds to claim 2 that the preparations are aqueous solutions and are applied between the freezing point and boiling point of the solutions under the process conditions of the method.

Claim 22 adds to claim 2 applying a sealing coat over the substrate surface.

The office action is silent as to the basis for the rejection of each of the dependent claims since there is no showing as to where in Dombay there is anticipation for each of the claimed features. See In re Oetiker, supra. Besides, the Examiner concedes in paper # 36 that applicant has pointed out the differences between the claims and the references, which suffices to overcome any anticipation rejection of the claimed features.

Dombay merely coats wood with an oxidizing agent to lighten the wood. Dombay uses ammonium persulfate, and cupric sulfate as accelerants in concentrated hydrochloric acid with a methylated spirit, and an organic solvent teepol. In some cases Dombay

treats some woods with an A solution to produce a darkening effect, and some woods with a B solution to produce a lightening effect. Whatever the result of Dombay, it is clear that Dombay does not teach the present invention as specifically pointed out in the claims.

Dombay relates to wood bleaching in which the reference mandates the use of methylated spirit, which the present invention particularly avoids. The present specification describes the ill-effects of prior art procedures that mandate alcohol based substances which harm the environment. In fact, Example 4, relied on by the Examiner, provides for 150 ml of methylated spirit. Potassium permanganate and cupric sulphate are used as bleaching accelerants in the one-step Dombay bleaching process. Acetic acid is used to stop the bleaching.

Nothing in the entire reference teaches or suggests the unique kit that has an aqueous solution of a mineral salt and an aqueous solution of a peroxide, with the mineral salt solution being applied prior to the peroxide solution and the in situ reaction of the applied substances with the substrate.

Claims 2-10, 21, 30, 31, and 36 are patentable under 35 U.S.C. 102(b) over Bures.

Claims 2-10, 21, 30, 31, and 36 have been described earlier.

The office action is silent as to the basis for the rejection of each of the dependent claims since there is no showing as to where in Bures there is anticipation for each of

the claimed features. See In re Oetiker, supra. Besides, the Examiner concedes in paper # 36 that applicant has pointed out the differences between the claims and the references, which suffices to overcome any anticipation rejection of the claimed features.

Bures relates to a three step process of treating woods with metal salts, oxidants, dyes and permeation agents. However, the reference does not teach nor suggest a kit for treating and coloring a wood substrate, comprising a first component aqueous solution of oxidizable metal salt preparation for a first application to the wood substrate, and a second component aqueous solution of oxygen source preparation for a sequential application to the wood substrate.

Bures has nothing to do with the aqueous solution preparations being adapted to sequentially penetrate the wood substrate when sequentially applied, and both aqueous solution preparations when applied sequentially in effective amounts, being adapted to react with each other within the wood substrate to impart physical color characteristic to the wood substrate.

Since the cited reference does not disclose all the elements of the present invention, the reference cannot anticipate the present invention. Lacking an element of the claims, the reference cannot anticipate the invention. Carmen Indus., Inc. v. Wahl, 220 USPQ 481, 485 (Fed. Cir. 1983).

Lacking the claimed elements, the references cannot anticipate the present claims.

The present claims are patentable under 35 U.S.C. 103(a).

In considering the patentability of the present invention, it is requested that the Board consider the invention as a whole, consider the scope and content of the prior art as a whole, consider the differences between the claims at issue and the prior art, and consider the level of ordinary skill in the art to which the invention pertains at the time the invention was made. Graham v. John Deere Co., 148 USPQ 459, 467 (1966).

#### THE INVENTION AS A WHOLE

The invention considered as a whole is best described by the appended claims.

#### PRIOR ART AS A WHOLE

The prior art to which the invention pertains is typified by the references of record.

#### DIFFERENCES BETWEEN THE INVENTION AND THE PRIOR ART

Each of the present claims defines unique features and each is individually patentable over the prior art.

The test in reviewing rejections under 35 U.S.C. 103 in which the examiner has relied on teachings of several references, is whether references, viewed individually and collectively, would have suggested claimed invention to a person possessing ordinary skill in the art, and citing references which merely indicate that isolated elements and/or features recited in the

claims are known is not a sufficient basis for concluding that combination of the claimed elements would have been obvious. Ex parte Hiyamizu, 10 USPQ2d 1393-1395 (Board of Patent Appeals and Inter., 1988); In re Kaslow, 217 USPQ 1089 (Fed. Cir. 1983); In re Deminski, 230 USPQ 313 (Fed. Cir. 1986).

Claims 2-8, 9-10, 20-22, and 30-36, are patentable under 35 U.S.C. 103(a) over Dombay.

Claim 2 defines a method for treating and coloring a wood substrate with the kit of claim 30 comprising the steps of contacting a substrate with a formulation comprising a metal salt, and allowing an effective amount of the formulation to penetrate the substrate, and sequentially but without regard to order; contacting the substrate with a formulation comprising an oxygen source, and allowing an effective amount of the formulation to penetrate the substrate; such that the two formulations react with each other in contact with the substrate to impart a stable change to the characteristics of the substrate.

Claim 3 adds to claim 30 that the oxygen source is a peroxide and both formulations are aqueous solutions.

Claim 4 adds to claim 30 that the metal salt is selected from the group consisting of salts of iron, silver, zinc, cerium, copper, magnesium, molybdenum, nickel, tin, chromium, aluminum, barium, calcium, sodium, potassium, and titanium, and combinations.

Claim 5 adds to claim 30 that the metal salt is selected from the group consisting of salts of aluminum, antimony, beryllium, bismuth, cadmium, chromium, cobalt, copper, gold, iridium, lead, magnesium, manganese, mercury, molybdenum, nickel, niobium, osmium, platinum, plutonium, potassium, rhodium, selenium, silicon, silver, sodium, tantalum, thorium, tin, titanium, tungsten, uranium, vanadium, and zinc, and combinations.

Claim 6 adds to claim 30 that the metal salt is selected from the group consisting of sulfates, chlorides, perchlorates, acetates, nitrates, permanganates, thiosulfates, and oxides, and combinations.

Claim 7 adds to claim 30 that the metal salt is selected from the group consisting of silver sulfate, silver perchlorate, silver nitrate, silver sulfite, iron (II) chloride, zinc perchlorate, iron (II) perchlorate, iron (II) sulfate, copper acetate, sodium thiosulfate, magnesium thiosulfate, potassium thiosulfate, potassium nitrate, potassium permanganate, copper nitrate, copper II carbonate dihydroxide, copper sulfate, titanium III sulfate, magnesium nitrate, cerium (III) perchlorate, and cerium nitrate, and combinations.

Claim 8 adds to claim 30 that the metal salt is selected from the group consisting of molybdenum (VI) oxide, zinc sulfate, copper (II) chloride, nickel perchlorate, nickel sulfate, copper (II) perchlorate, tin (II) sulfate, tin (I) chloride, chromium (III) sulfate, aluminum sulfate, cerium (III) perchlorate, zinc



perchlorate, titanium hydride, chromium (III) perchlorate, zinc powder, manganese (II) chloride, aluminum chloride, titanium (IV) chloride, silver chloride, and titanium (II) sulfate, and combinations.

Claim 9 adds to claim 30 that the oxygen source is a peroxide.

Claim 10 adds to claim 30 that the oxygen source is selected from the group consisting of hydrogen peroxide, sodium peroxide, zinc peroxide, calcium peroxide, barium peroxide, and lithium peroxide, and combinations.

Claim 20 adds to claim 2 the step of drying the substrate between the two steps.

Claim 21 adds to claim 2 that the preparations are aqueous solutions and are applied between the freezing point and boiling point of the solutions under the process conditions of the method.

Claim 22 adds to claim 2 applying a sealing coat over the substrate surface.

Claim 30 describes a kit for coloring a wood substrate, comprising a metal salt preparation, and an oxygen source preparation, the preparations being adapted to penetrate the substrate when applied, and both preparations, when applied sequentially in effective amounts, being adapted to react with each other to impart a fixed physical characteristic to the substrate.

Claim 31 adds to claim 30 that the metal salt preparation and/or the oxygen source preparation further comprises an additive selected from the group consisting of thickener, alcohol, emulsifier, coloring agent, pigment, dye, bleach, sealer, finishing agent, tint, acrylic finish, latex finish, polyurethane, alcohol, gelling agent, tableting agent, surfactant, buffer, citric acid, tannic acid, acetic acid, other acid, color, salt, stabilizer, antimicrobial, antifungal, insecticide, insect repellant, ultraviolet protectant, and fire retardant, and combinations.

Claim 32 adds to claim 30 that the metal salt preparation is an aqueous solution comprising between about 0.001% and about 20% (w/v) metal salt.

Claim 33 adds to claim 30 that the oxygen source preparation is an aqueous solution comprising between about 0.1% and about 50% (w/v) peroxide.

Claim 34 adds to claim 30 that the metal salt preparation is an aqueous solution comprising between about 0.025 % and about 8% (w/v) metal salt.

Claim 35 adds to claim 30 that the oxygen source preparation is an aqueous solution comprising between about 0.3% and about 15% peroxide.

Claim 36 adds to claim 30 that the preparations are concentrates suitable for dilution by a user.

The office action is silent as to the basis for the rejection of each of the dependent claims since there is no

showing as to where in Dombay there is basis for each of the claimed features. See In re Oetiker, supra. Besides, the Examiner concedes in paper # 36 that applicant has pointed out the differences between the claims and the references, which suffices to overcome any obviousness rejection of the claimed features.

As previously pointed out, Dombay merely coats wood with an oxidizing agent to lighten the wood. Dombay uses ammonium persulfate, and cupric sulfate as accelerants in concentrated hydrochloric acid with a methylated spirit, and an organic solvent teepol. Dombay treats some woods with an A solution to produce a darkening effect, and some woods with a B solution to produce a lightening effect. It is clear that Dombay does not teach the present invention as specifically pointed out in the claims.

Dombay relates to wood bleaching in which the reference mandates the use of methylated spirit, which the present invention particularly avoids. The present specification describes the ill-effects of prior art procedures that mandate alcohol based substances which harm the environment. In fact, Example 4, relied on by the Examiner, provides for 150 ml of methylated spirit. Potassium permanganate and cupric sulphate are used as bleaching accelerants in the one-step Dombay bleaching process. Acetic acid is used to stop the bleaching.

That [the prior art] might incorporate elements which could be used in appellants' system does not render appellants' claims

obvious when there is no suggestion of using these elements in substantially the same manner as appellants use them. In re Donovan, 184 USPQ 414, 421 (CCPA, 1975).

Claims 2-10, 20-22, 30-36 are patentable under 35 U.S.C. 103(a) over Bures.

Claims 2-10, 20-22, and 30-36 have been described earlier.

The office action is silent as to the basis for the rejection of each of the dependent claims since there is no showing as to where in Bures there is basis for each of the claimed features. See In re Oetiker, supra. Besides, the Examiner concedes in paper # 36 that applicant has pointed out the differences between the claims and the references, which suffices to overcome any obviousness rejection of the claimed features.

As previously stated, Bures relates to a three step process of treating woods with metal salts, oxidants, dyes and permeation agents. However, the reference does not teach nor suggest a kit for treating and coloring a wood substrate, comprising a first component aqueous solution of oxidizable metal salt preparation for a first application to the wood substrate, and a second component aqueous solution of oxygen source preparation for a sequential application to the wood substrate.

Like each of the other references, Bures too expressly intends to impart a stabilized color to dark and medium colored woods by utilizing hypochlorite, persulphate and peroxide

compounds. The use of mineral salt ions specifically Iron, Zinc or Silver is not employed or mentioned. In fact, the reference relies on the exclusive use of hypochlorite, persulphate and peroxide compounds to bleach wood.

Contrastingly, the claimed process is expressly concerned with darkening the color of the top-most layer of wood cellulose and other substrates by transitioning water soluble mineral ions into oxides within the top-most layer of the substrate. The process bonds the transitioned minerals to the cellulose fibers and creates a more or less stable color which may slightly lighten or darken over time.

In fact, none of the references teach or suggest the claimed two step in situ treatment with the unique kit defined in the present claims. The present invention uniquely provides treatment of all substrates including light colored wood and is exclusively a two part process.

"To establish inherency, the extrinsic evidence 'must make it clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.'" In re Robertson, 48 USPQ2d 1949, 1951 (Fed. Cir. 1999) quoting from Continental Can Co. v. Monsanto Co., 20 USPQ2d 1746, 1749 (Fed. Cir. 1991). "Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. Id. 20 USPQ2d at 1749.

The invention provides an aqueous solution of a mineral salt thereby providing water soluble ions of mineral salts which are applied to a suitable substrate and allowed to briefly dry. In a second step the water soluble mineral salts transition into insoluble mineral oxide compounds which form inside and around the cellulose fibers. The agents used to transition the mineral salt ions into insoluble oxide compounds include dilute hydrogen peroxide solutions, to prevent harm to the environment, and other dilute strength agents such as sodium peroxide and sodium hydroxide. Again, stronger solutions pose a greater threat to the environment and user.

The present process is expressly useful in enhancing the natural nuances of a particular piece of wood, thereby giving it a more natural color than a conventional stain. The process enhances the variations of color within a given species of wood, therefore differing from the prior art, all of which aim to provide bleaching for more uniform color of wood or of hair, which is not relevant.

The commercial viability of the present process relies on enhancing the naturally occurring qualities of a specific wood particularly lighter colored species such as Pine, Larch, Poplar, Alder, Maple, Fir, Ash, Bamboo (a grass), Hackberry, Black Willow, Oak, Birch, and others. All of those are considered colored woods, many of which are rapidly grown, sustainable harvestable species.

"The inherency of an advantage and its obviousness are entirely different questions. That which may be inherent is not necessarily known. Obviousness cannot be predicated on what is unknown. In re Spormann and Heinke, 150 USPQ 449, 452 (CCPA 1966). "... if the Patent Office wishes to rely on what 'Those familiar with [invention] would know,' it must produce some reference showing what such knowledge consists of." Id.

The light fastness is considerably better than prior art dyes (specifically aniline dyes) used to color wood and other substrates. The primary commercial use for the invention is to impart a range of colors (earth tones primarily) to light and medium colored woods and to use as an alternative to conventional staining products which may contain hazardous VOC's or other hazardous chemical compounds. Also, conventional dyes and colorants for wood does not enhance the natural qualities of the wood or other substrate as does the Auger Mineral Stain Process.

Minerals used in the present invention expressly create color within the wood or substrate. Minerals utilized alone or in combination are: Iron, Zinc and Silver salts, specifically Iron I Chloride, Sulfate and Perchlorate; Zinc Perchlorate, Silver Perchlorate and Silver Nitrate, among others.

No potassium persulphate, sodium persulfate, ammonium persulfate, sodium carbonate, acetic acid, glacial acetic acid, potassium permanganate, cupric ions or ammonia are used in the claimed process. Thus, the claimed invention always imparts the substrate with an alkaline pH.

See In re Meng, 181 USPQ 94, 97 (CCPA 1974), wherein the Court held:

"Of course the invention seems simple, after the fact. But simplicity, particularly in an old and crowded art, may argue for rather than against patentability. In re Sporck, 133 USPQ 360 (CCPA 1962). Progress in the crowded arts, usually made in small increments, is as important as it is in arts at the pioneer stage. In re Hummer, 113 USPQ 66 (CCPA 1957). The Constitution envisages and seeks progress in the 'useful arts,' not just those more esoteric or scientific."

Proper surface preparation consistent with any preparatory procedure used to prepare wood for finishing allows for adequate penetration of the mineral salt solution. Additionally an anionic surfactant may be added to the mineral salt solution to aid in the penetration of the mineral salt solution, this is especially useful for industrial and manufacturing situations where dust, grease and other debris may be present and form surface tension prohibiting the mineral salt solution (A) from penetrating the substrate.

"The mere fact that a certain thing may result from a given set of circumstances is not sufficient [to establish inherency]." In re Rijckaert, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993), quoting from In re Oelrich, 212 USPQ 323, 326 (CCPA 1981). "Such a retrospective view of inherency is not a substitute for some teaching or suggestion supporting an obviousness rejection." Rijckaert, id., quoting from In re Newell, 13 USPQ2d 1248, 1250 (Fed. Cir. 1989).

Contrary to the prior art, and according to the invention, the solution is completely dry prior to the application of the



(catalyst) solution. Also, contrary to the prior art, the present invention transitions the European Oak instantly through its process to the yellow color the prior art is attempting to avoid. By producing the yellow or "aged" color Auger allows woodworkers to match the tone of "aged" or "antique" wood thereby giving woodworkers the opportunity to make reproductions, restore or color wood articles in a manner consistent with the color expected from wood which has acquired an "aged" or "antique" appearance.

The Board, in Ex parte Levengood, 28 USPQ2d 1300, 1301 (Board of App. and Inter. 1993), observed:

"The only suggestion for the examiner's combination of the isolated teachings of the applied references improperly stems from appellant's disclosure and not from the applied prior art. In re Ehrreich, 200 USPQ 504 (CCPA 1979). At best, the examiner's comments regarding obviousness amount to an assertion that one of ordinary skill in the art would have been able to arrive at the appellant's invention because he had the necessary skills to carry out the requisite... steps. This is an inappropriate standard for obviousness."

The above is true for the present case.

Nothing in the references, either singly or in combination, teaches or suggests the claimed features. Therefore, the references cannot anticipate nor render obvious any of the claims.

#### **LEVEL OF ORDINARY SKILL IN THE ART**

A person having ordinary skill in the art is an artisan being taught the reference teachings.

SUMMARY

Claims 1 and 31 are patentable under 35 U.S.C. 112, second paragraph.

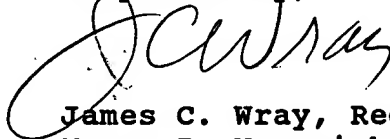
Each of the present claims is patentable under 35 U.S.C. 102(b) over the prior art of record.

When considering the present invention as a whole and the prior art to which the invention pertains as a whole, when considering the differences between the present invention and the prior art, and when considering the level of ordinary skill in the art to which the invention pertains, it is clear that the invention would not have been obvious under 35 U.S.C. 103(a) to a person having ordinary skill in the art at the time the invention was made.

CONCLUSION

Reversal of the Examiner and allowance of all the claims are respectfully requested.

Respectfully,



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October 17, 2001

## APPENDIX

### **APPEALED CLAIMS:**

1. A kit for imparting a pre-determined color to a solid wood substrate, comprising:

(a) an aqueous solution of a first component consisting of a mineral salt and water as a first application on the solid wood substrate, and

(b) a second component comprising an aqueous solution of a peroxide as a sequential application on the solid wood substrate, the mineral salt and peroxide solutions applied sequentially in effective amounts to the substrate and reacting with each other in the presence of the substrate to impart the color to the substrate.

2. Treating and coloring a wood substrate with the kit of claim 30 comprising the steps of:

(a) contacting the wood substrate with the first component aqueous solution preparation comprising the oxidizable metal salt, and allowing an effective amount of the first component aqueous solution preparation to penetrate the wood substrate, and sequentially but without regard to order,

(b) contacting the wood substrate with the second component aqueous solution preparation comprising an oxygen source, and allowing an effective amount of the second component aqueous solution preparation to penetrate the wood substrate,

(c) reacting in situ within the wood substrate the first and the second component aqueous solution preparations with each other in contact with the wood substrate, and  
(d) imparting a stable color change to color characteristics of the wood substrate.

3. The kit of claim 30, wherein the oxygen source is a peroxide and both preparations are exclusively aqueous solutions.

4. The kit of claim 30, wherein the metal salt is selected from the group consisting of salts of iron, silver, zinc, cerium, copper, magnesium, molybdenum, nickel, tin, chromium, aluminum, barium, calcium, sodium, potassium, and titanium, and combinations thereof.

5. The kit of claim 30, wherein the metal salt is selected from the group consisting of salts of aluminum, antimony, beryllium, bismuth, cadmium, chromium, cobalt, copper, gold, iridium, lead, magnesium, manganese, mercury, molybdenum, nickel, niobium, osmium, platinum, plutonium, potassium, rhodium, selenium, silicon, silver, sodium, tantalum, thorium, tin, titanium, tungsten, uranium, vanadium, and zinc, and combinations thereof.

6. The kit of claim 30, wherein the metal salt is selected from the group consisting of sulfates, chlorides, perchlorates, acetates, nitrates, permanganates, thiosulfates, and oxides, and combinations thereof.

7. The kit of claim 30, wherein the metal salt is selected from the group consisting of silver sulfate, silver perchlorate,

silver nitrate, iron (II) chloride, zinc perchlorate, iron (II) perchlorate, iron (II) sulfate, copper acetate, sodium thiosulfate, magnesium thiosulfate, potassium thiosulfate, potassium nitrate, potassium permanganate, copper nitrate, copper II carbonate dihydroxide, copper sulfate, titanium III sulfate, magnesium nitrate, cerium (III) perchlorate, and cerium nitrate, and combinations thereof.

8. The kit of claim 30, wherein the metal salt is selected from the group consisting of molybdenum (VI) oxide, zinc sulfate, copper (II) chloride, nickel perchlorate, nickel sulfate, copper (II) perchlorate, tin (II) sulfate, tin (I) chloride, chromium (III) sulfate, aluminum sulfate, cerium (III) perchlorate, zinc perchlorate, titanium hydride, chromium (III) perchlorate, manganese (II) chloride, aluminum chloride, titanium (IV) chloride, silver chloride, and titanium (II) sulfate, and combinations thereof.

9. The kit of claim 30, wherein the oxygen source is a peroxide.

10. The kit of claim 30, wherein the oxygen source is selected from the group consisting of hydrogen peroxide, sodium peroxide, zinc peroxide, calcium peroxide, barium peroxide, and lithium peroxide, and combinations thereof.

20. The treating of claim 2, further comprising the step of drying the substrate between the two contacting steps.

21. The treating of claim 2, wherein the aqueous solutions are applied between the freezing point and boiling point of the solutions under the process conditions of the method.

22. The treating of claim 2, further comprising a sealing coat over a substrate surface.

30. A kit for coloring a wood substrate, comprising

(a) a first component aqueous solution of oxidizable metal salt preparation for a first application to the wood substrate, and

(b) a second component aqueous solution of oxygen source preparation for a sequential application to the wood substrate,

the aqueous solution preparations being adapted to sequentially penetrate the wood substrate when sequentially applied, and both aqueous solution preparations when applied sequentially in effective amounts, being adapted to react with each other within the wood substrate to impart physical color characteristic to the wood substrate.

31. The kit of claim 30, wherein the metal salt preparation and/or the oxygen source preparation further comprises an additive selected from the group consisting of thickener, emulsifier, coloring agent, pigment, dye, bleach, sealer, finishing agent, tint, acrylic finish, latex finish, polyurethane, alcohol, gelling agent, tableting agent, surfactant, buffer, citric acid, tannic acid, acetic acid, other acid, color, salt, stabilizer, antimicrobial, antifungal,

insecticide, insect repellant, ultraviolet protectant, and fire retardant, and combinations.

32. The kit of claim 30, wherein the metal salt preparation is an aqueous solution comprising between about 0.001% and about 20% (w/v) metal salt.

33. The kit of claim 30, wherein the oxygen source preparation is an aqueous solution comprising between about 0.1% and about 50% (w/v) peroxide.

34. The kit of claim 30, wherein the metal salt preparation is an aqueous solution comprising between about 0.025 % and about 8% (w/v) metal salt.

35. The kit of claim 30, wherein the oxygen source preparation is an aqueous solution comprising between about 0.3% and about 15% peroxide.

36. The kit of claim 30, wherein the preparations are concentrates suitable for dilution by a user.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

STEPHEN B. AUGER

Serial No.: 08/865,419

Art Unit: 1751

Filed: May 28, 1997

Examiner: M. Einsmann

For: MINERAL STAINS FOR WOOD AND OTHER SUBSTRATES

RECEIVED  
MAY - 7 2002  
TECHNOLOGY CENTER 1700

JOINT PETITION FOR WITHDRAWAL OF ERRONEOUS ABANDONMENT  
AND REQUEST FOR REINSTATEMENT OF APPEAL

To the Director of Patents and Trademarks

Sir:

In response to the Notice of Abandonment mailed April 3, 2002, kindly consider the following:

Withdrawal of the Notice of Abandonment and Reinstatement of this Appeal are respectfully requested.

As the abandonment is in error and non-justifiable, Applicant should not be penalized into paying any fees.

Kindly withdraw the abandonment and provide an Examiner's Answer.

An unnumbered paper dated April 3, 2002 cited 37 CFR 1.136(a). In a telephone call to Ms. Einsmann on April 8, 2002, she indicated that she had held an abandonment after consulting with Douglas McGinty of Special Programs Quality Control.

The April 3, 2002 paper cited 37 CFR §1.136(a), which would have been appropriate if no brief had been filed. That is not



the case. A Brief was filed on January 22, 2002, which the April 3, 2002 paper acknowledges.

The unnumbered paper dated December 21, 2001 did not check Box 6, 6(a) or 6(b) and acknowledged errors in a Patent Office paper mailed August 17, 2001.

The examiner has never made a separate rejection of the dependent claims. It is clear that the independent claims as well as the dependent claims distinguish the invention from the references.

The submitted Briefs have been substantially in compliance with the rules. The Briefs met every requirement of an Appeal Brief and presented separate detailed arguments to the separate rejections in the final office action, as required by 37 CFR §1.192, including each requirement of Rule 192(c)(1-8), including subsections (8)(i-v) and 9.

Each of the briefs complied with all of the requirements of Rule 1.192.

Brief III complied with all of the requirements of the checked boxes and all of the requirements of 192.

#### **BACKGROUND**

Examiner Caroline Liott finally rejected the present claims in an office action, paper # 33, mailed January 17, 2001.

Applicant filed a Notice of Appeal on April 17, 2001, appealing the final rejection of the claims.

Applicant filed an Appeal Brief on June 18, 2001.

Examiner Margaret Einsmann mailed a first Notification of Non-compliance under 37 CFR 1.192(c) on August 17, 2001. Boxes 4, 6(b), 8 and 9 were marked-off on that Notification.

Applicant filed a first substitute Appeal Brief on October 18, 2001 addressing each of the issues raised by the Examiner in the first Notification.

Examiner Einsmann mailed a second Notification of Non-compliance under 37 CFR 1.192(c) on December 21, 2001. Boxes 4, 8 and 9 were marked-off in the second Notification.

Applicant filed a second substitute Appeal Brief on January 22, 2002 addressing each of the issues raised in the second Notification.

Examiner Einsmann responded with a Notice of Abandonment mailed April 3, 2002, indicating non-compliance with the requirement in the second Notification. The Examiner relied on the MPEP to show alleged deficiencies in Applicant's second substitute Appeal Brief.

#### **ISSUE**

The only issue pointed out by the Examiner in the attachment to the Notice of Abandonment is that Applicant has failed to provide reasons for patentability of each of the appealed claims separately. Boxes 6, 6(a) and 6(b) were not marked in the paper dated 12/21/2001.

One issue is whether Applicant's second substitute Appeal Brief provides reasons for the patentability of each of the appealed claims?

#### ARGUMENTS

The holding of abandonment is in error and should be withdrawn.

1. The Examiner's holding of abandonment is arbitrary and in error. The Examiner issued objections to Applicant's original Brief which were addressed by Applicant in the first substitute Appeal Brief.

2. The Examiner responded with the second Notification. Applicant again complied by filing a second substitute Appeal Brief. Boxes 6, 6(a) and 6(b) were not checked. Applicant pointed out in modular arguments addressed to each rejection that the original Examiner who issued the final rejection in the January 17, 2001, office action had failed to meet the burden of presenting a prima facie case and had failed to show where in each of the references there was a basis for the Examiner's rejection of each of the features in the dependent claims.

Rejection of claims ... must be vacated ... since patent examiner ... has not referred to specific portions of each of cited references, and since the rejection therefore requires both applicants and Board ... to speculate as to portions of each reference relied upon, ..." Ex parte Gambogi, 62 USPQ2d 1209, 1212 (Bd. Pat. App. & Int. 2001).

It is not Applicant's job to speculate on the Examiner's rejections when the office action is silent about the basis for

each rejection. Applicant had provided basis for applicant's arguments by citing:

The examiner cannot sit mum, leaving the applicant to shoot arrows into the dark hoping to somehow hit a secret objection harbored by the examiner. The 'prima facie case' notion ... was intended to leave no doubt among examiners that they must state clearly and specifically any objections (the prima facie case) to patentability, and give the applicant fair opportunity to meet those objections ... the concept serves to level the playing field and reduces the likelihood of administrative arbitrariness. (emphasis added) In re Oetiker, 25 USPQ2d 1443, 1447 (Fed. Cir. 1992) (Plager, J., concurring); see In re Piasecki, 233, USPQ 785, 788 (Fed. Cir. 1984).

Because of the lack of basis in the final rejection Applicant is unable to rebut non-existent rejections based on mere speculation. Applicant pointed that out in the second substitute Appeal Brief filed January 22, 2002. However, instead of sending an Examiner's Answer pointing out the basis for the rejection of each and every claim, the Examiner responded by erroneously abandoning the case.

The Court of Appeals for Federal Circuit states:

"Particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed." In re Kotzab, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000).

The Federal Circuit has held that the Patent Office is obligated to make necessary findings and to provide an administrative record showing the evidence on which the findings are based, accompanied by the agency's reasoning in reaching its conclusion. In re Zurko, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001).

The decision "must be justified within the four corners of the record." In re Gartside, 53 USPQ2d 1769, 1774 (Fed. Cir. 2000). The Examiner has neither made the necessary findings nor provided any reasoning for the arbitrary conclusion of obviousness based on an admission that the references do not teach the claimed features.

3. The Examiner relies on the MPEP for support for the Examiner's objections and abandonment. The very same MPEP § 1206 also clearly spells out:

**"A distinction must be made between the lack of any argument and the presentation of arguments which carry no conviction. In the former case, a notification of a defective appeal brief is in order, while in the latter case, the application .... is forwarded to the Board for a decision on the merits." MPEP § 1206-9.**

The record clearly reflects that Examiner Einsmann took over the case after Applicant's appeal and that Examiner Einsmann did not issue the final office action of January 17, 2001 (paper # 33). The Examiner apparently believes that the arguments may have no conviction. However, the Examiner is required to forward the case to the Board of Appeals, for the Board to decide on the merits of whether all the claims stand/fall together or not.

4. The Examiner relies on the following form paragraph for the Notification for Non-Compliance:

**12.69.02 Statement in brief That Claims Do Not Stand or Fall Together - Supporting Reasons Lacking:**

The brief includes a statement that claims [1] do not stand or fall together, but fails to present reasons in support thereof as required under 37 CFR 1.192(c)(7). MPEP § 1206.

However, attention is kindly drawn to the Examiner Note right below the above form paragraph which further provides:

**Examiner Note:**

1. This form paragraph should be used only when no supporting reasons are presented in the brief. If reasons are presented, even if they are not agreed with, use form paragraph 12.55.02 instead of this form paragraph. Reasons for disagreement are discussed in the either the "Grounds of Rejection" or in the "Response to Argument" portion of the Examiner's Answer. MPEP § 1206-13.

The above applies to the present case. The Examiner simply does not agree with Applicant's arguments, and therefore, it behooves the Examiner to state the reasons for disagreement in the Examiner's Answer which has never been provided so far to the Applicant.

5. Since the MPEP advocates use of form paragraph 12.55.02, that form paragraph is being reproduced below for convenience:

**12.55.02 No Agreement With Brief Why Claims Do Not Stand or Fall together**

The appellant's statement in the brief that certain claims do not stand or fall together is not agreed with because [1].

**Examiner Note:**

In bracket 1, explain why the claim grouping listed in the brief is not agreed with by the examiner and why, if appropriate, e.g., the claims as listed by the appellant are not separately patentable. MPEP § 1200-22.

6. In fact, the office action does not provide any basis for the rejection of each of the features in every dependent claim and therefore Applicant is unable to determine the Examiner's basis for the rejection of each of the claims to adequately rebut the rejections. Therefore, as dictated by Oetiker "without more applicant is entitled to grant of the patent."

If examination at the initial stage does not produce a prima facie case of unpatentability, then without more the applicant is entitled to grant of the patent. In re Oetiker, 25 USPQ2d 1443, 1447 (Fed. Cir. 1992) citing In re Grabiak, 226 USPQ 870, 873 (Fed. Cir. 1985).

7. In case the PTO deems it necessary then Applicant is providing a fourth, Supplemental Appeal Brief. Three copies of the Supplemental Brief are attached hereto for the examiner's convenience to save time and delay and to avoid receiving yet another Notification from the Examiner. Applicant's arguments are based on speculation of what an examiner's unstated rejections may have intended to be in the final rejection of the claims. It is recognized that the present examiner did not write the final rejection. If the Supplemental Brief is

satisfactory to the present Examiner of record, it will be filed.

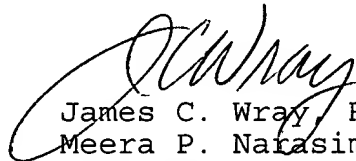
The Supplemental Brief is presented in modular form so that complete sections may be stricken and disregarded if, as anticipated, the examiner decides to drop many of the non wood-related reference citations, such as for example Clairol's Brown, to save the Board's time.

#### CONCLUSION

The abandonment should be withdrawn.

The appeal should be reinstated.

Respectfully,



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Tel: (703) 442-4800  
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May 7, 2002



AFI 1751

PTO/SB/17 (10-01)

Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# FEE TRANSMITTAL for FY 2002

OCT 17 2001

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT

(\$ 55.00

## Compleat if Known

Application Number	08/865,419
Filing Date	05/28/1997
First Named Inventor	AUGER
Examiner Name	C. Liott
Group Art Unit	1751
Attorney Docket No.	

## METHOD OF PAYMENT

1. ☐ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number   
Deposit Account Name

- ☐ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17  
☐ Applicant claims small entity status. See 37 CFR 1.27

2. ☒ Payment Enclosed:

☒ Check ☐ Credit card ☐ Money Order ☐ Other

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
101 740	201 370		Utility filing fee	
106 330	206 165		Design filing fee	
107 510	207 255		Plant filing fee	
108 740	208 370		Reissue filing fee	
114 160	214 80		Provisional filing fee	

SUBTOTAL (1) (\$)

### 2. EXTRA CLAIM FEES

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent Claims	-20** =	X	
Multiple Dependent	-3** =	X	

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
103 18	203 9		Claims in excess of 20	
102 84	202 42		Independent claims in excess of 3	
104 280	204 140		Multiple dependent claim, if not paid	
109 84	209 42		** Reissue independent claims over original patent	
110 18	210 9		** Reissue claims in excess of 20 and over original patent	

SUBTOTAL (2) (\$)

\*\*or number previously paid, if greater. For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
105 130	205 65	Surcharge - late filing fee or oath	
127 50	227 25	Surcharge - late provisional filing fee or cover sheet	
139 130	139 130	Non-English specification	
147 2,520	147 2,520	For filing a request for <i>ex parte</i> reexamination	
112 920*	112 920*	Requesting publication of SIR prior to Examiner action	
113 1,840*	113 1,840*	Requesting publication of SIR after Examiner action	
115 110	215 55	Extension for reply within first month	
116 400	216 200	Extension for reply within second month	
117 920	217 460	Extension for reply within third month	
118 1,440	218 720	Extension for reply within fourth month	
128 1,960	228 980	Extension for reply within fifth month	
119 320	219 160	Notice of Appeal	
120 320	220 160	Filing a brief in support of an appeal	
121 280	221 140	Request for oral hearing	
138 1,510	138 1,510	Petition to institute a public use proceeding	
140 110	240 55	Petition to revive - unavoidable	
141 1,280	241 640	Petition to revive - unintentional	
142 1,280	242 640	Utility issue fee (or reissue)	
143 460	243 230	Design issue fee	
144 620	244 310	Plant issue fee	
122 130	122 130	Petitions to the Commissioner	
123 50	123 50	Processing fee under 37 CFR 1.17(q)	
126 180	126 180	Submission of Information Disclosure Stmt	
581 40	581 40	Recording each patent assignment per property (times number of properties)	
146 740	246 370	Filing a submission after final rejection (37 CFR § 1.129(a))	
149 740	249 370	For each additional invention to be examined (37 CFR § 1.129(b))	
179 740	279 370	Request for Continued Examination (RCE)	
169 900	169 900	Request for expedited examination of a design application	

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## SUBMITTED BY

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Signature	<i>James C. Wray</i>	Date	10/18/2001			

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